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—Gene Iley

MOSES-MP helps Western be a ‘good neighbor’

Western has a new way to help contain oil spills that could contaminate or pollute agricultural and drinking water supplies—a computer software program called the Mineral Oil Spill Evaluation System-Multi Phase.

Developed by EPRI, MOSES-MP was designed to calculate the probability of an oil spill—which can occur in substation circuit breakers and transformers—reaching navigable water sources. Data is fed into the model, including distance and slope to the target water body, ground cover and soil types and rainfall, so the spill scenario can be accurately analyzed.

Most leaks and spills are cleaned up as part of routine maintenance and are not environmentally damaging. However, large spills, although rare, can cause environmental damage.

MOSES-MP was initially used in the Sierra Nevada Region by **Chris Johnson**, a Folsom environmental specialist, who said SN has saved money by using the model’s analysis. “We have also avoided costs related to substation construction,” he said, adding that because of SN’s success, MOSES-MP was expanded throughout Western.

Dave Pearson, an environmental specialist in Golden, has been assisting **Gene Iley** and **Dave Vietti**, environmental specialists in Loveland and Huron, to collect data at substations and use the MOSES-MP model to analyze the probability of spills reaching water.

The model can be used in other aspects of spill prevention and to predict oil penetration into the ground and any resulting contamination. It can also be used to determine what containment works best and the effectiveness of existing containment.

Facilities that need containment are being identified. This information will be incorporated into the construction and rehabilitation program. “Environmental regulations require that Western have containment systems at those facilities where there is a reasonable potential for spilled oil reaching water,” said Iley. “The MOSES-MP program allows us to quantitatively analyze a site to determine whether it needs containment.”

“In the past, it was more of an individual’s perception whether or not a site required containment,” Pearson said, adding that Western can save money by preventing unnecessary construction at sites that do not need it. “We may also save money in remediation costs and fines associated with an oil spill if our program results in construction of a containment system at a site that may have been otherwise overlooked.”

Pearson, Iley and Vietti agree MOSES-MP is helpful in ensuring that Western’s operations remain environmentally sound. “**Mike Hacskeylo** has talked about us being a good neighbor,” said Pearson. “By preventing water pollution, we can do that.”